



Introduction to System Administration

Lecture 01

BSIT 5th A & B

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Agenda

What is System Administrator?

Windows 10 Overview

User Management

Lab 01

What is a System Administrator?

A system administrator (sysadmin) is an information technology professional who supports a multiuser computing environment and ensures continuous, optimal performance of IT services and support systems.



Windows 10 Overview

Microsoft Windows 10 brings a long list of important changes that any IT pro should look forward to, including major improvements in the user experience, significant security enhancements, and a new web browser.

Only three months after the initial release of Windows 10 on July 29, 2015, Microsoft said more than 110 million devices were already running Windows 10.

The Windows 10 family spans a wide range of devices, from phones to game consoles and the new HoloLens headset, with PCs in the middle.



Windows 10 Editions

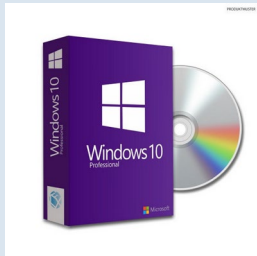
- Windows 10 Home
- Windows 10 Pro
- Windows 10 Pro for Workstations

<https://www.microsoft.com/en-us/windowsforbusiness/compare>

Windows 10 system requirements

- Processor: 1 gigahertz (GHz) or faster processor or SoC.
- RAM: 1 gigabyte (GB) for 32-bit or 2 GB for 64-bit.
- Hard disk space: 16 GB for 32-bit OS or 20 GB for 64-bit OS.
- Graphics card: DirectX 9 or later with WDDM 1.0 driver
- Display: 800 x 600

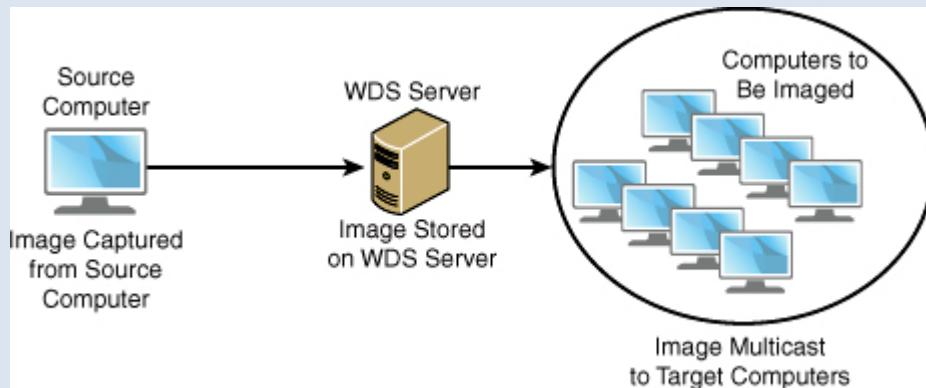
Windows 10 installation



From DVD




















From Bootable USB



From ISO image

How to make a USB bootable?

| | | |
|--|---|---|
|  Rufus |  UNetbootin |  Universal USB Installer |
|  Etcher |  LinuxLive USB Creator |  Hiren's BootCD |
|  Ventoy |  WinToFlash |  Startup Disk Creator |
|  SystemRescueCD |  GNU GRUB |  PowerISO |
|  Windows To Go |  EasyBCD |  Fedora Media Writer |
|  RMPrepUSB |  WinSetupFromUSB | |

How to make a USB bootable?

Open a Command Prompt window as an administrator and type below commands:

diskpart

list disk

select disk <x>

clean

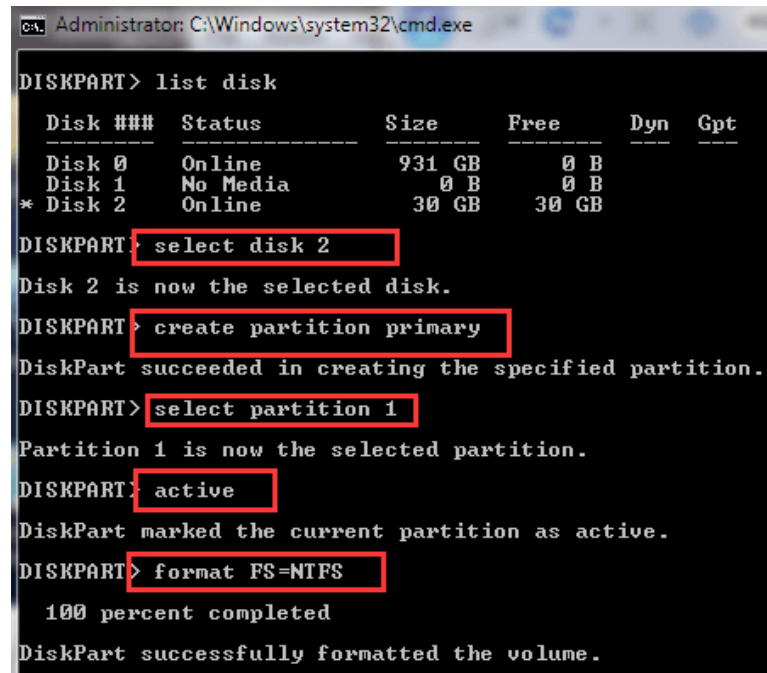
create partition primary

active

format fs=ntfs quick

assign

exit



```
Administrator: C:\Windows\system32\cmd.exe

DISKPART> list disk

   Disk ###  Status         Size       Free       Dyn  Gpt
   -----  -
   Disk 0      Online          931 GB     0 B
   Disk 1      No Media         0 B       0 B
   * Disk 2     Online          30 GB     30 GB

DISKPART> select disk 2
Disk 2 is now the selected disk.

DISKPART> create partition primary
DiskPart succeeded in creating the specified partition.

DISKPART> select partition 1
Partition 1 is now the selected partition.

DISKPART> active
DiskPart marked the current partition as active.

DISKPART> format FS=NTFS
100 percent completed
DiskPart successfully formatted the volume.
```

And then copy all windows files to bootable USB.

User Management

On Windows-based operating system, your user account type controls what tasks you can perform on your computer, in some cases you may need administrative rights to perform some tasks or to use some applications.

User Account Types

- Standard User accounts are for everyday computing.
- Administrator accounts provide the most control over a computer and should only be used when necessary.
- Guest accounts are intended primarily for people who need temporary use of a computer.

Note: If your account is a domain account there are several additional account types. You may need to contact the network administrator to change your permissions.

Types of logins

- There are two basic types of login in Windows 10. The first type is using the Microsoft login on the web and the second type is the “local” login that users were used to in Windows 7 and before.
- Local accounts keep your user data strictly on your device. On the other hand, with a Microsoft account, your data can be synced across multiple devices.

Action item for students

Please read below article or any other relevant article to find the difference between (Local, Domain, and Microsoft Account)

<https://resources.infosecinstitute.com/topics/operating-system-security/types-of-user-accounts-in-windows-10-local-domain-microsoft/>

Lab 01

- Installation of VMware Workstation
- Creation of Virtual Machine for Windows 10
- Installation of Windows 10 on Virtual Machine

https://youtube.com/playlist?list=PLyxxg8agb6OW_TRwavepSKXq4rYsa3uGyB&si=FZ9sB5EEiyY-KNgS



Thank you

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